Enough is enough, Mr Chen. It's time to pay up.

- Since February this year, GSX Techedu has come under heavy scrutiny and damning criticism - nine reports by four different short-sellers, one letter to Senator Marco Rubio, and a barrage of other attacks - but still it refuses to come clean.

- We continued to track its operations, and what we found was more clumsy attempts at deceit, cover-ups, and the withholding of key information - more cause to keep the alarm bells raised and ringing.

- It seems the last report by Grizzly Research published on June 2 had sent GSX's Gaotu team into a wild frenzy, as they scrambled to cover their muddy tracks. We call this the 'Grizzly effect'. We found two exceptionally glaring red flags:

    1. **The classes on June 6 and 7 saw an explosive 1,000 to 1,400% spike in unique users.** Can it be that this many students became overzealous learners overnight? We doubt it. We believe the Gaotu team was playing 'catch-up' to reach its lofty targets.

    2. **There were more students in the classroom, but it has gone all quiet.** If the spurt in student numbers was real, it was strange to note that their comments were not growing in a proportionate manner, but dropping instead. There were no answers to be found from the students. Perhaps the bots might have the answer.

- Enough of the games. We are convinced there is an underlying integrity issue with the Gaotu team. GSX needs to halt trading immediately and conduct an internal investigation to clean up its act. It owes this much to its investors.

A letter to Mr Chen Xiangdong of GSX Techedu

骑虎难下

“He who rides the tiger is afraid to dismount”

Dear Mr Chen Xiangdong

The cards are on the table. It’s been nine reports by four different short-sellers, one letter to Senator Marco Rubio, and a barrage of other attacks. If we were in a game of blackjack, everyone else would be on 20, and you on 16. It's your turn to draw - it’s the only logical choice. But your house of cards keeps building up, and we all know what happens when it is given a push.

We’ve been monitoring your company since the first short-sell report was published in February. With each report, we dug deeper into your operations, but we never found any answers.

When the first Citron Research report alleged that GSX had overstated its revenues by 70%, you pointed out that the report had only tracked Genshuixue’s numbers while completely missing Gaotu100’s numbers. The report did not look into the Gaotu100 classes, said to be the company’s leading contributor at ~69.34%, compared with Genshuixue, which made up only ~30% of total revenues. This was why the picture it painted of GSX was largely inaccurate.

Later, Muddy Waters and Grizzly Research joined the fray, tracking the number of students, which they said were the result of bots and ‘brushing’. You and your team vehemently denied those claims, saying that there was no way their methods could accurately track unique users, overlapping IPs, as well as the early joiners, burst joiners and the precise joiners.

We watched all of this unfold and tried to give you the benefit of the doubt. Maybe you didn’t know what your team was up to. Maybe because of the ambitious sales targets and user growth rates you’ve set, it was your team that resorted to putting up a show just to hit their KPIs. Maybe you were like Luckin Coffee’s Chairman Lu, who maintained he never knew that his company’s books were being cooked.

As a retailer with physical stores in plain sight, Luckin didn’t have the advantage of being able to “hide” their operations. GSX, on the other hand, is a pure play online player - and there are so many invisible corners it can make use of to hide whatever it wants to. But for how long? Anyone and anything in the digital world leaves behind footprints too.

What we have continued to see was merely more attempts at deceit, cover-ups, and the withholding of key information - clumsy, dirty, muddy footprints that remain all too visible.

When Grizzly in its latest report on June 2 accused you of having inflated Gaotu enrollment and revenue numbers, you and your PR team dismissed its findings.

Yet, like Grizzly, we arrived at the same conclusion, though with a different method - one that you yourself endorsed from Citron's first report. And almost immediately, we found two very glaring red flags:

1. **An explosive 1,000 to 1,400% spike in unique users. Really?**
2. **More students in the classroom, but it's gone all quiet.**

Let us unpack this for you.

First, how did we do it?

Here's a math question: How many students are there in a Gaotu class?

Perhaps the more accurate way of asking this is: How many *human* students are there in a Gaotu class?

To answer this question ourselves, we tracked the comments left behind by each student. This was far from easy because by now, your IT team has learned to dynamically generate different and random user identifiers (user_id) for the same student each time he or she comments in that one class. If student Liu Jiarong as shown below, for example, makes a total of 20 comments during a class, he would have generated 20 different user_ids in that same period. So had we simply relied on user_ids to determine the number of unique users, we would have ended up with many duplicates.

Result Grid | Filter Rows: Search | Export:

room_id	user_comment	user_name	user_id	time_recorded	lecture_id
6002230660326056	老师好!	刘嘉格	310822818	2020-05-20 18:01:56	4546352592986625
6002230660326056	老师好!	刘嘉格	310822818	2020-05-20 18:06:59	4546352592986625
6002230660326056	老师好!	刘嘉格	310822818	2020-05-20 18:07:22	4546352592986625
6002230660326056	老师好!	刘嘉格	310823982	2020-05-20 18:12:40	4546352592986625
6002230660326056	老师好!	刘嘉格	310823982	2020-05-20 18:13:47	4546352592986625
6002230660326056	老师好!	刘嘉格	310823982	2020-05-20 18:15:00	4546352592986625
6002230660326056	————————————————————...	刘嘉格	310823982	2020-05-20 18:17:41	4546352592986625
6002230660326056	老师好!	刘嘉格	310823982	2020-05-20 18:17:48	4546352592986625
6002230660326056	现在除我以外，都是一群憨憨。	刘嘉格	310823982	2020-05-20 18:19:06	4546352592986625
6002230660326056	————————以上都是废话。————————	刘嘉格	310823982	2020-05-20 18:21:15	4546352592986625
6002230660326056	an	刘嘉格	310823982	2020-05-20 18:21:31	4546352592986625
6002230660326056	有人吗?	刘嘉格	310823982	2020-05-20 18:23:44	4546352592986625
6002230660326056	终于有看见活人了。	刘嘉格	310823982	2020-05-20 18:26:08	4546352592986625
6002230660326056	老师好!	刘嘉格	310828290	2020-05-20 18:37:37	4546352592986625
6002230660326056	90 100	刘嘉格	310828290	2020-05-20 18:59:55	4546352592986625

Snapshot of an example of an unique 'user_name', Liu Jiarong, having many different 'user_id' that was constantly changing during the same class ("lecture_id" and "room_id")

It's no surprise then that a student's user_id changes dynamically with the different classes (lecture_id) he attends as well. Why go through all that trouble to obfuscate and confuse?

Message | Result1 | Profile

lecture_id	user_name	user_id
5049681314075136	胡宇佳	331019795
5049681314075136	胡宇佳	331021145
5049681314075136	胡宇佳	331041329
4772804482745862	胡宇佳	356832385
4772804482745862	胡宇佳	356852347
4772804482745862	胡宇佳	356865778
4772804482745864	胡宇佳	46320310
4772804482745864	胡宇佳	549052813
4772804482745863	胡宇佳	643835851
4772804482745863	胡宇佳	694087795
5111896134951936	胡宇佳	611767817

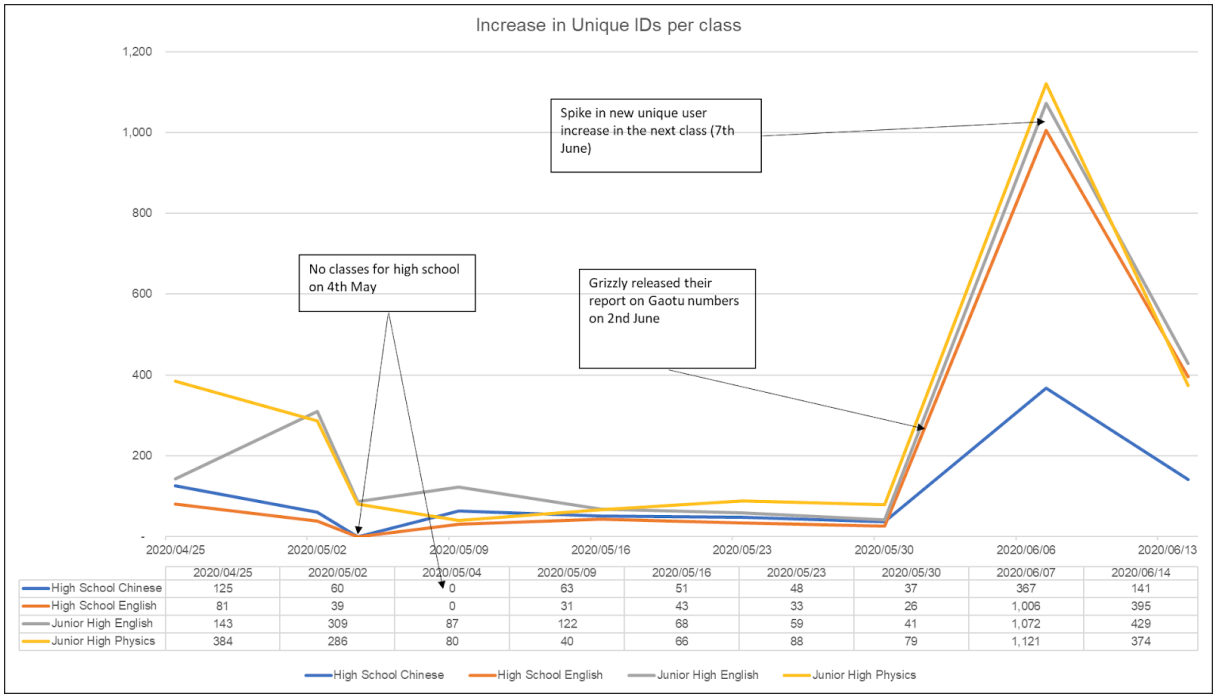
Snapshot of an unique user, "Hu Yujia", having different user_id for different lectures that he has signed up for.

We kept it simple and tracked just the usernames (user_name). Of course, this means we cannot make the distinction between students with the exact same names in the same class, and there are indeed many people with the same names in all of China. Still, the probability of having two same students in the same class is very low. We factored in a generous estimate, where 5 to 10% of the class would have students with names that overlap.

Remember we mentioned those muddied footprints? That's what we then found a long trail of.

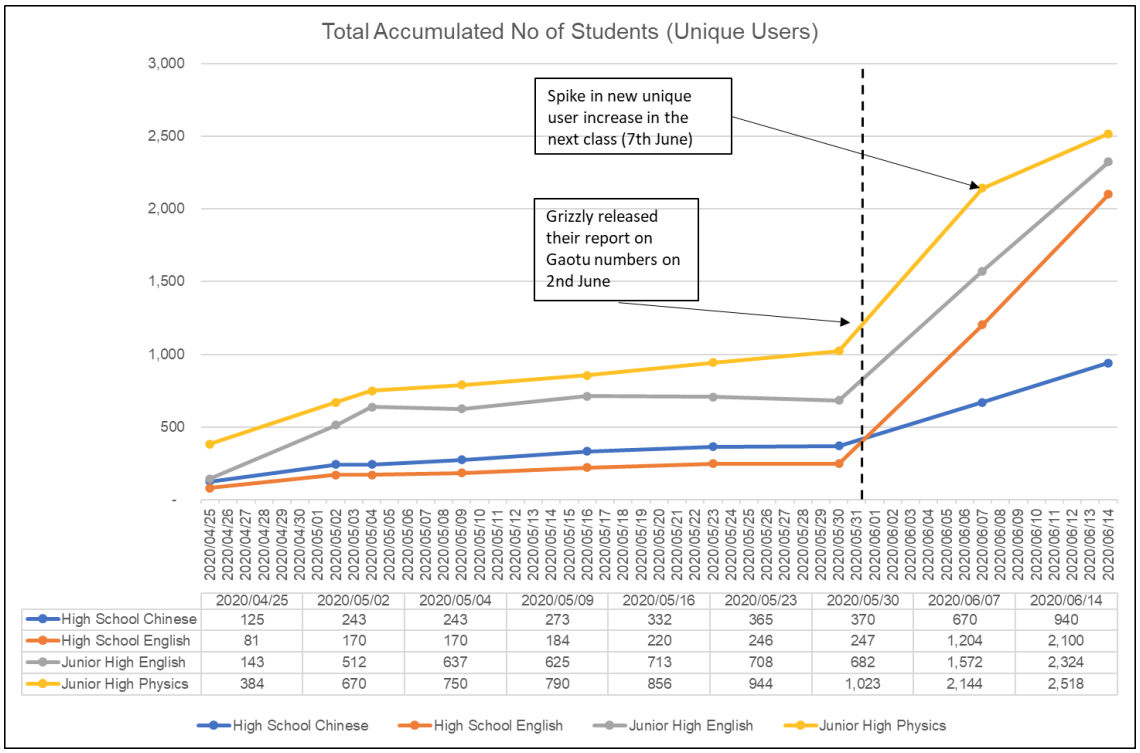
1. **An explosive 1,000 to 1,400% spike in unique users**

Somehow, on the same weekend the Grizzly report was released, the number of unique users per class exploded. Four classes across the junior and high school levels saw a ***1,000 to 1,400% spike*** in numbers, with the June 7 classes pulling in 1,006 new students, from just 26 new students the Sunday before (May 30). We found this mind-boggling. How do you explain the jump when 1) the number of new students for the last six classes had been steadily tapering off, and when 2) the June 7 class was the 8th class in a course (a total of 10 classes), which means the "new" students had already missed out on seven earlier classes?



	2020/04/25	2020/05/02	2020/05/04	2020/05/09	2020/05/16	2020/05/23	2020/05/30	2020/06/07	2020/06/14
High School Chinese	125	60	0	63	51	48	37	367	141
High School English	81	39	0	31	43	33	26	1,006	395
Junior High English	143	309	87	122	68	59	41	1,072	429
Junior High Physics	384	286	80	40	66	88	79	1,121	374

Graph 1: Spike in new unique users per class on June 6, after Grizzly's report was released



	2020/04/25	2020/05/02	2020/05/04	2020/05/09	2020/05/16	2020/05/23	2020/05/30	2020/06/07	2020/06/14
High School Chinese	125	243	243	273	332	365	370	670	940
High School English	81	170	170	184	220	246	247	1,204	2,100
Junior High English	143	512	637	625	713	708	682	1,572	2,324
Junior High Physics	384	670	750	790	856	944	1,023	2,144	2,518

Graph 2: A sharp rise in the accumulated number of students, after Grizzly's report was released

Graph 2 depicts the accumulated number of unique users/students. What it shows is that the number of students who participated in May 30 classes was very low, with an average of only

500 students per class, much fewer than the average 2,000 enrolled students per class that GSX has often bragged about. Look at the numbers for June 6 and 7. Somehow, it seems, the students decided to play “catch-up” in the 8th and 9th classes. This bumped the number of unique users to an average of 2,000 per class - coincidentally, after the Grizzly report came out, too.

Before you respond, Mr Chen, let us first rule out some possibilities.

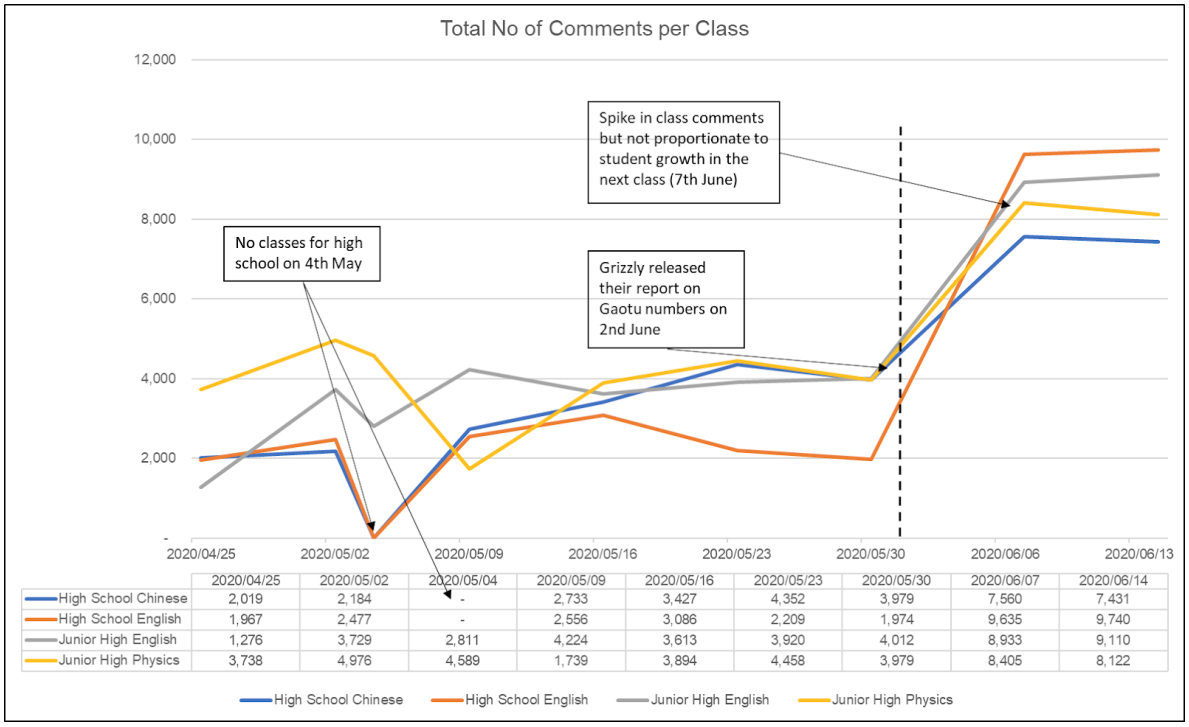
Could it be that a bunch of new students decided to enrol into the class all at once just before the 8th class on June 6? We doubt it. Registration and purchase options for these classes were taken down from the website long before May 30. Understandably, because why would students join the June courses midway, and still pay the full price? The logical move would be to push students to enrol in the upcoming summer courses over July and August instead.

You may then say that the new enrolments into the summer courses were allowed to participate in these spring classes for free, which explains the higher number of students. But how did GSX sell so many summer courses (>1,000 enrolments) in advance when the spring courses had started out with only a few hundred new students on April 25? If this is going to be your retort, save it - it’s a very poor one.

2. **More students in the classroom, but suddenly, it’s gone all quiet.**

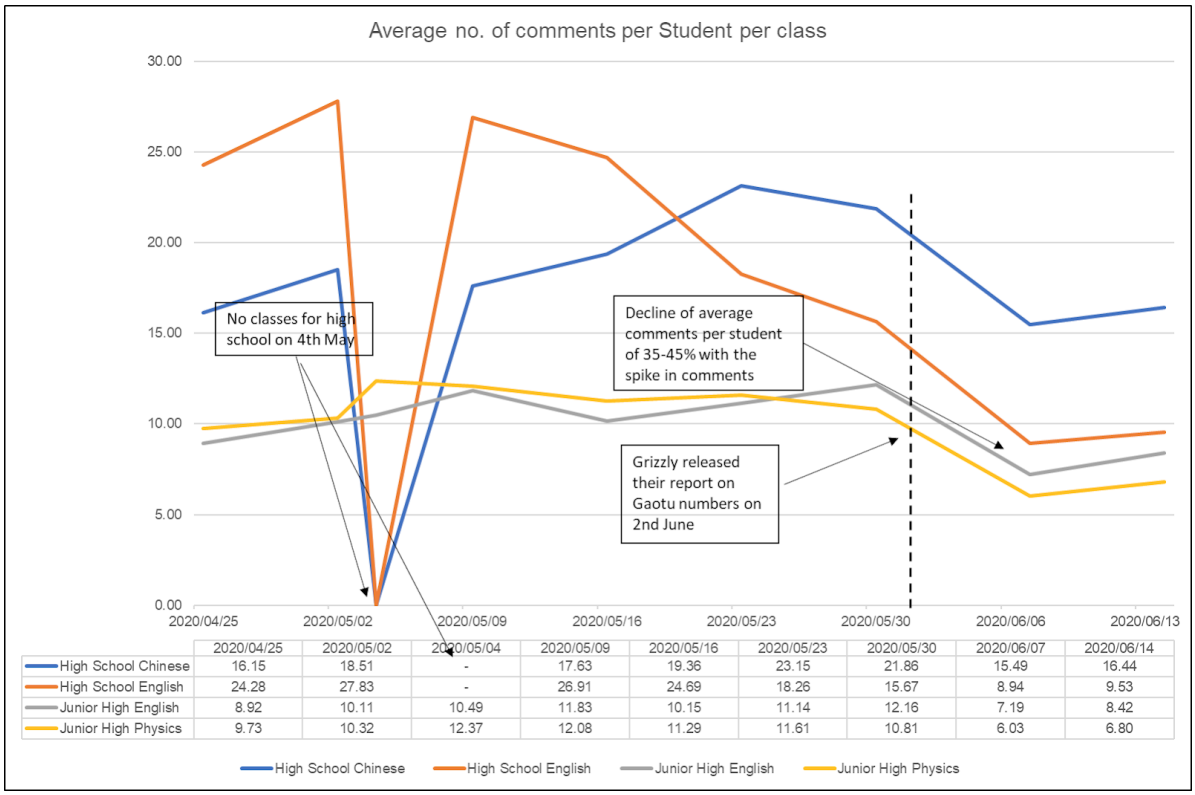
So let’s say in light of the infamous high school entrance exams (高考 and 中考) in July, there really are that many new students who have enrolled for the summer courses, and also allowed to participate in the June 6 classes.

But why then were the number of comments so disproportionate? We found that the average comments made per student had dropped significantly compared to the previous weekend.



	2020/04/25	2020/05/02	2020/05/04	2020/05/09	2020/05/16	2020/05/23	2020/05/30	2020/06/07	2020/06/14
High School Chinese	2,019	2,184	-	2,733	3,427	4,352	3,979	7,560	7,431
High School English	1,967	2,477	-	2,556	3,086	2,209	1,974	9,635	9,740
Junior High English	1,276	3,729	2,811	4,224	3,613	3,920	4,012	8,933	9,110
Junior High Physics	3,738	4,976	4,589	1,739	3,894	4,458	3,979	8,405	8,122

Graph 3: Sudden spike in comments on June 6 class but not proportionate to the student growth



	2020/04/25	2020/05/02	2020/05/04	2020/05/09	2020/05/16	2020/05/23	2020/05/30	2020/06/07	2020/06/14
High School Chinese	16.15	18.51	-	17.63	19.36	23.15	21.86	15.49	16.44
High School English	24.28	27.83	-	26.91	24.69	18.26	15.67	8.94	9.53
Junior High English	8.92	10.11	10.49	11.83	10.15	11.14	12.16	7.19	8.42
Junior High Physics	9.73	10.32	12.37	12.08	11.29	11.61	10.81	6.03	6.80

Graph 4: Comments per student declined 35-45% on June 6 when number of comments spiked

With the sudden jump in the number of students for each class, shouldn't the number of comments made by each student increase as well, or at the very least, be the same as the previous average?

Take the High School English class. Before the Grizzly report on June 2, the number of comments per student in each class had varied between 15.6 to 27.8 comments, from a pool of about 200 students participating per class. On June 6, a total of 1,200 students attended the class, yet the number of comments per student plunged to about half the average recorded from the previous class on May 30, from 15.8 to 8.9. Shouldn't a more crowded forum spur livelier discussions, with higher participation rate per student, or at least maintain the previous average? Are the students (or their parents) paying good money to keep mum?

The same phenomenon occurred for all of the other classes we tracked, including the other three in Graphs 3 and 4.

To dig deeper, we watched both the May 30 and June 6 classes to spot any anomalies. There were no significant changes to the teacher's teaching style, delivery or special assignments. So why has it gone all quiet?

If the spike in student numbers was a result of those who were enrolled at first but were absent or stayed idle throughout the last seven classes, why did all thousands of them decide to participate together on June 6? If they had always been watching recordings for the past seven classes, what triggered them to join the 8th class live? Are they even real students?

	31-May	7-Jun
Total enrolled students	**Before Grizzly**	**After Grizzly**
High School Chinese	370	670
High School English	247	1,204
Junior High English	682	1,572
Junior High Physics	752	1,763
Average no of students per class	**513**	**1,302**

Table 1: The stark contrast in the number of unique IDs or implied number of enrolled students pre- and post-Grizzly

The numbers in Table 1 show the stark differences between the number of implied enrolled students before and after the release of the Grizzly report. The number of students ballooned from an average per class of 513 to 1,302 just from the 7th class (May 31) to the 8th class (June 7). The number of students in the High School English Class nearly quintupled from 247 to 1,204. Did we just catch your Gaotu team red-handed?

The Grizzly Effect

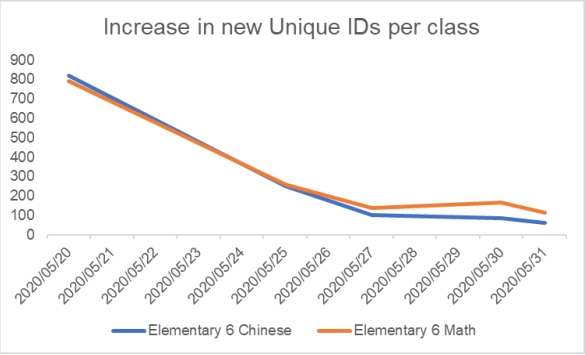
The spike in student numbers in the last few classes occurred right after Grizzly's report had to be more than pure coincidence, because it was such a rare and suspicious occurrence. We call this the 'Grizzly Effect'.

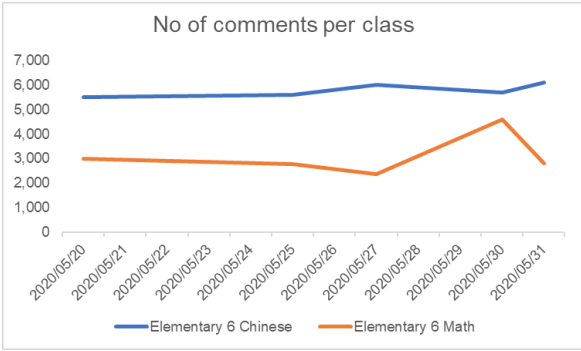
Let's look at two classes that were conducted between mid- to end-May. They did not coincide with the Grizzly report on June 2.

Increase in new Unique IDs per class	2020/05/20	2020/05/25	2020/05/27	2020/05/30	2020/05/31	Total no of studnets
Elementary 6 Chinese	820	250	100	84	63	1317
Elementary 6 Math	790	260	136	165	113	1464

No. of comments per class	2020/05/20	2020/05/25	2020/05/27	2020/05/30	2020/05/31
Elementary 6 Chinese	5,498	5,603	6,010	5,703	6,101
Elementary 6 Math	2,985	2,768	2,364	4,596	2,803

Average no of comments per student	2020/05/20	2020/05/25	2020/05/27	2020/05/30	2020/05/31
Elementary 6 Chinese	6.70	6.91	7.86	8.35	8.26
Elementary 6 Math	3.78	4.52	4.02	5.98	3.99





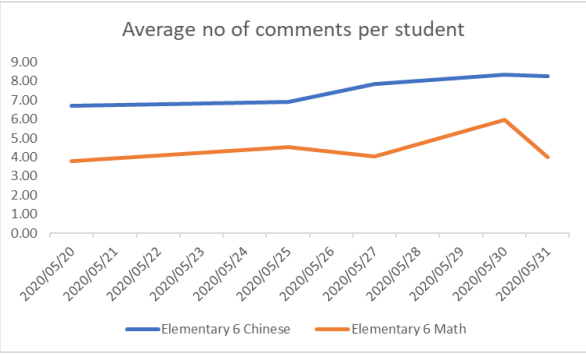


Table 2: Key stats of two elementary classes that had five classes from May 20 to 31

Table 2 shows that these two elementary classes began with the highest enrollment on the first class (May 20) and saw the number of new unique IDs (based on comments) taper off towards the end of the class (May 31). This seemed logical because few students would sign up halfway or towards the end of the course. The new IDs that appeared in the last two classes were way

lower than in the first two. In fact, these two classes fetched only 1,317 and 1,464 students - below the average enrollment of 2,000 that GSX always talked about.

The average number of comments did not fluctuate wildly throughout the five classes as well. It was stable.

But here's the thing: all these numbers made sense. These classes were not subject to the wild, Grizzly effect that saw the average number of enrolments skyrocket. Or would they have, should the Grizzly report been released earlier? We will leave it to readers and investors to decide.

Incomplete class lists in Q2

In its report, Grizzly tracked 76 Gaotu classes in Q2 2020. So you and your team defended yourselves by saying Grizzly did not capture the full class list, which was more than that, but fell short of clarifying exactly how many.

We assumed this was due to the classes that had started in February but stretched into May, which under strict revenue recognition policy should be considered as Q2 revenues. So to abide by accounting rules, we included those classes in our tracking processes and added about 40 more classes. In total, we tracked 118 classes until June 14 (two weeks before the end of Q2), compared with Grizzly's 76.

【2020-春】高二英语提高班	王赞	2500	22/2/20	6/6/20
【2020-春】高二英语提高班	王双林	2500	22/2/20	6/6/20
【2020-春】高二历史提高班	朱秀宇	2500	22/2/20	6/6/20
【2020-春】高二物理提高班	武文成	2500	22/2/20	6/6/20
【2020-春】高二物理提高班	马小军	2500	22/2/20	6/6/20
【2020-春】高二物理提高班	于钦俊	2500	22/2/20	6/6/20
【2020-高考】地理二三轮复习春季班	林潇	2700	22/2/20	6/6/20
【2020-高考】历史二三轮复习春季班	朱秀宇	2700	16/2/20	31/5/20
【2020-高考】政治二三轮复习春季班	王法垚	2700	15/2/20	30/5/20
【2020-高考】生物二三轮复习春季班	徐京	2700	15/2/20	30/5/20
【2020-高考】化学二三轮复习春季班	赵学清	2700	16/2/20	31/5/20
【2020-高考】化学二三轮复习春季班	韩逸伦	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	董志英	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	高明静	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	梁娜	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	姜婷婷	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	董志英	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	高明静	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	梁娜	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	姜婷婷	2700	16/2/20	31/5/20
【2020-高考】语文二三轮复习春季班	沈黎江	2700	15/2/20	30/5/20
【2020-高考】语文二三轮复习春季班	胡文凯	2700	15/2/20	30/5/20
【2020-高考】语文二三轮复习春季班	张宁	2700	15/2/20	30/5/20
【2020-高考】语文二三轮复习春季班	谢欣然	2700	15/2/20	30/5/20
【目标140+】2020高考数学二三轮复习春季班	付力	2700	16/2/20	31/5/20
【目标140+】2020高考数学二三轮复习春季班	周帅	2700	16/2/20	31/5/20
【目标140+】2020高考数学二三轮复习春季班	童灏	2700	16/2/20	31/5/20
【目标140+】2020高考数学二三轮复习春季班	陈国栋	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	陈国栋	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	付力	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	周帅	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	童灏	2700	16/2/20	31/5/20
【2020-高考】英语二三轮复习春季班	续智贤	2700	15/2/20	30/5/20
【2020-高考】英语二三轮复习春季班	闫铭	2700	15/2/20	30/5/20
【2020-高考】英语二三轮复习春季班	疏娟	2700	15/2/20	30/5/20
【2020-高考】英语二三轮复习春季班	王替	2700	15/2/20	30/5/20

Table 3: Gaotu classes (example) that started in mid-February and were extended to end-May or early June; what Grizzly had supposedly 'missed' tracking in its June 2 report

We grouped them into numbers that are pre-Grizzly Effect (ending May 30), and post-Grizzly Effect (ending June 14). In that period, the number of students who sought to 'catch-up' with their lessons have done so by leaps and bounds, with classes drawing about 124,000 enrolments to 313,000 enrolments. We wonder: was it actually the students or your Gaotu team that was playing catch-up to hitting their targets every quarter?

				Our numbers			
RMB Million	Q1 GSX reported	Q2 GSX Projected	Grizzly Uncovered	Pre-Grizzly report	% GSX Discrepancy	Post Grizzly report	% GSX Discrepancy
GSX Total quarterly revenues	1,298	1,541	169	290	81%	709	54%
Gaotu quarterly revenues	896	1,063	117	201	81%	489	54%
Gaotu No. of Paid Enrollments	534,060	634,042	71,609	124,506	80%	313,672	51%

**Grey shaded numbers are extrapolated from tracked Gaotu numbers*

Table 4: Even playing 'catch-up' was not enough for Gaotu to hit its Q2 revenue targets

Even then, this approach still did not get the Gaotu team anywhere close to targets set for Q2. Our calculations show that the team is going to miss their target by a large margin. No amount of catch-up will save them.

We've looked hard at the trail, found a ton of fresh, muddy footprints, and we are convinced there is an underlying integrity issue with your Gaotu team. This calls for nothing less than an internal investigation. If you can't come clean with this matter, at least do what it takes to clean up your internal mess.

If you want to gamble, do it in private. But you are playing with public monies - putting a lot of investors at risk - and it's time to pay up.

Yours truly,
VV

Appendix

【2020-春】七年级数学精讲班（全国）	王泽龙	1199	11/4/20	13/6/20
【2020-春】七年级英语精讲班	王霞	1199	11/4/20	14/6/20
【2020-春】七年级英语精讲班	王冰	1199	11/4/20	14/6/20
【2020-春】七年级英语精讲班	周钦	1199	11/4/20	14/6/20
【2020-春】七年级英语精讲班	颜青	1199	11/4/20	14/6/20
【2020-春】八年级物理精讲班	郭志强	1199	12/4/20	13/6/20
【2020-春】八年级物理精讲班	刘怀宇	1199	11/4/20	13/6/20
【2020-春】八年级英语精讲班	曲艺	1199	12/4/20	13/6/20
【2020-春】八年级英语精讲班	毕玉琦	1199	11/4/20	13/6/20
【2020-春】八年级语文精讲班	马秀英	1199	12/4/20	13/6/20
【2020-春】八年级语文精讲班	许天翼	1199	12/4/20	13/6/20
【2020-春】八年级语文精讲班	张腾飞	1199	12/4/20	13/6/20
【2020-春】八年级语文精讲班	邵天坤	1199	11/4/20	13/6/20
【2020-春】八年级数学精讲班	王垚	1199	12/4/20	13/6/20
【2020-春】八年级数学精讲班	王宇亮	1199	11/4/20	13/6/20
【2020-春】八年级数学精讲班	刘梦亚	1199	11/4/20	13/6/20
【2020-春】化学决胜中考冲刺班	吴立音	2499	2/5/20	4/7/20
【2020-春】化学决胜中考冲刺班	张立琛	2499	2/5/20	4/7/20
【2020-春】物理决胜中考冲刺班	杨瑛	2899	2/5/20	5/7/20
【2020-春】物理决胜中考冲刺班	袁媛	2899	2/5/20	5/7/20
【2020-春】数学决胜中考冲刺班	陈冠男	2899	2/5/20	5/7/20
【2020-春】数学决胜中考冲刺班	李娜	2899	2/5/20	5/7/20
【2020-春】英语决胜中考冲刺班	张馨月	2899	3/5/20	4/7/20
【2020-春】英语决胜中考冲刺班	杨全坤	2899	3/5/20	4/7/20
【2020-春】语文决胜中考冲刺班	杨思思	2899	3/5/20	5/7/20
【2020-春】高一英语提高班	杨文哲	2500	23/2/20	7/6/20
【2020-春】高一英语提高班	王双林	2500	23/2/20	7/6/20
【2020-春】高一英语提高班	史心语	2500	23/2/20	7/6/20
【2020-春】高一英语提高班	张健	2500	23/2/20	7/6/20
【2020-春】高一英语提高班	闫铭	2500	23/2/20	7/6/20
【2020-春】高一生物提高班	徐京	2500	23/2/20	7/6/20
【2020-春】高一语文提高班	谢欣然	2500	22/2/20	6/6/20
【2020-春】高一物理提高班	张展博	2500	22/2/20	6/6/20
【2020-春】高一物理提高班	马小军	2500	22/2/20	6/6/20
【2020-春】高一物理提高班	姜婷婷	2500	22/2/20	6/6/20
【2020-春】高一数学提高班	马力仲	2500	22/2/20	6/6/20

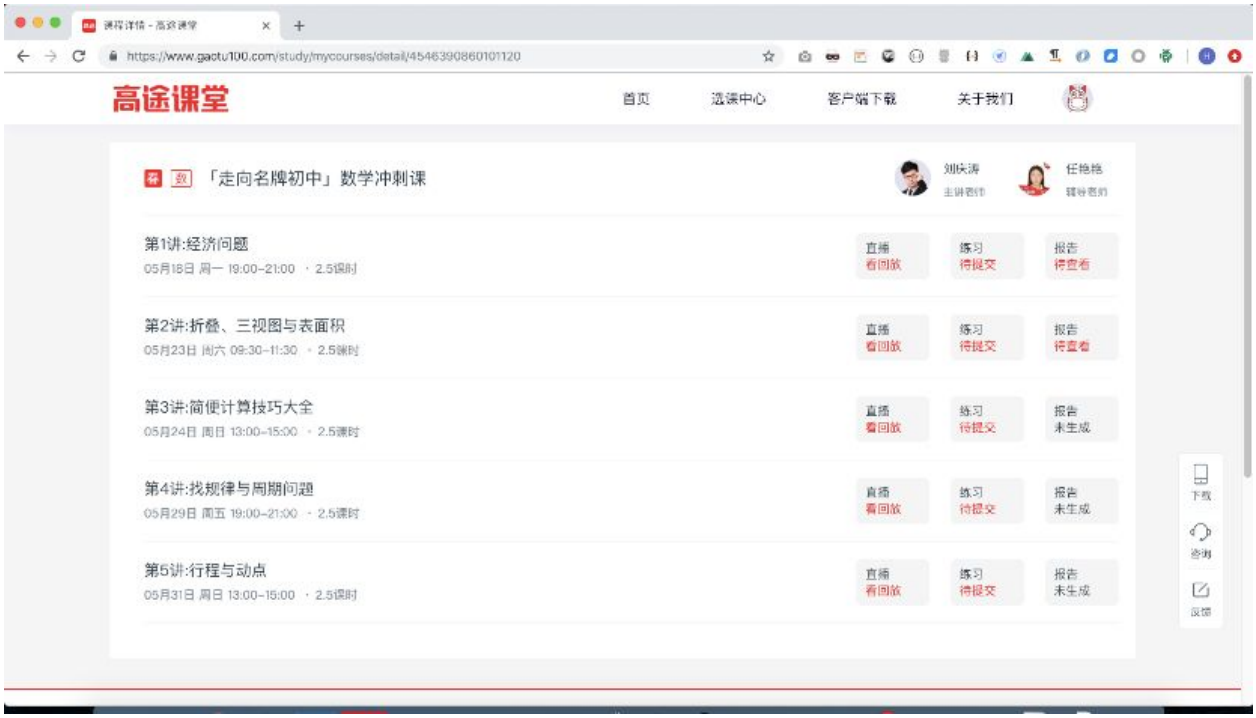
【2020-春】高二英语提高班	王赞	2500	22/2/20	6/6/20
【2020-春】高二英语提高班	王双林	2500	22/2/20	6/6/20
【2020-春】高二历史提高班	朱秀宇	2500	22/2/20	6/6/20
【2020-春】高二物理提高班	武文成	2500	22/2/20	6/6/20
【2020-春】高二物理提高班	马小军	2500	22/2/20	6/6/20
【2020-春】高二物理提高班	于钦俊	2500	22/2/20	6/6/20
【2020-高考】地理二三轮复习春季班	林潇	2700	22/2/20	6/6/20
【2020-高考】历史二三轮复习春季班	朱秀宇	2700	16/2/20	31/5/20
【2020-高考】政治二三轮复习春季班	王法垚	2700	15/2/20	30/5/20
【2020-高考】生物二三轮复习春季班	徐京	2700	15/2/20	30/5/20
【2020-高考】化学二三轮复习春季班	赵学清	2700	16/2/20	31/5/20
【2020-高考】化学二三轮复习春季班	韩逸伦	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	董志英	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	高明静	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	梁娜	2700	16/2/20	31/5/20
【目标75+】2020高考物理二三轮复习春季班	姜婷婷	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	董志英	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	高明静	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	梁娜	2700	16/2/20	31/5/20
【目标100+】2020高考物理二三轮复习春季班	姜婷婷	2700	16/2/20	31/5/20
【2020-高考】语文二三轮复习春季班	沈黎江	2700	15/2/20	30/5/20
【2020-高考】语文二三轮复习春季班	胡文凯	2700	15/2/20	30/5/20
【2020-高考】语文二三轮复习春季班	张宁	2700	15/2/20	30/5/20
【2020-高考】语文二三轮复习春季班	谢欣然	2700	15/2/20	30/5/20
【目标140+】2020高考数学二三轮复习春季班	付力	2700	16/2/20	31/5/20
【目标140+】2020高考数学二三轮复习春季班	周帅	2700	16/2/20	31/5/20
【目标140+】2020高考数学二三轮复习春季班	童灏	2700	16/2/20	31/5/20
【目标140+】2020高考数学二三轮复习春季班	陈国栋	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	陈国栋	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	付力	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	周帅	2700	16/2/20	31/5/20
【目标125+】2020高考数学二三轮复习春季班	童灏	2700	16/2/20	31/5/20
【2020-高考】英语二三轮复习春季班	续智贤	2700	15/2/20	30/5/20
【2020-高考】英语二三轮复习春季班	闫铭	2700	15/2/20	30/5/20
【2020-高考】英语二三轮复习春季班	疏娟	2700	15/2/20	30/5/20
【2020-高考】英语二三轮复习春季班	王赞	2700	15/2/20	30/5/20

标题	老师	价格	开始日期	结束日期
【2020-春】一年级数学精讲班	周云鹏	1099	18/4/20	27/6/20
【2020-春】一年级数学精讲班	欧新环	1099	19/4/20	26/6/20
【2020-春】一年级英语精讲班	李子婵	1099	18/4/20	27/6/20
【2020-春】一年级英语精讲班	原赫梓	1099	19/4/20	26/6/20
【2020-春】一年级语文精讲班	陈佳	1099	19/4/20	26/6/20
【2020-春】二年级数学精讲班	王婷婷	1099	18/4/20	27/6/20
【2020-春】二年级数学精讲班	田莹	1099	19/4/20	26/6/20
【2020-春】二年级英语精讲班	解书丹	1099	18/4/20	27/6/20
【2020-春】二年级英语精讲班	赵尧	1099	19/4/20	26/6/20
【2020-春】二年级语文精讲班	张婷婷	1099	19/4/20	26/6/20
【2020-春】二年级语文精讲班	金永存	1099	18/4/20	27/6/20
【2020-春】三年级数学精讲班	马冬	1099	19/4/20	26/6/20
【2020-春】三年级英语精讲班	贺艺	1099	18/4/20	27/6/20
【2020-春】三年级英语精讲班	代卉	1099	18/4/20	27/6/20
【2020-春】三年级英语精讲班	董嘉琳	1099	19/4/20	26/6/20
【2020-春】三年级语文精讲班	王勤	1099	18/4/20	27/6/20
【2020-春】三年级语文精讲班	刘磊	1099	18/4/20	27/6/20
【2020-春】四年级数学精讲班	胡涛	1099	19/4/20	26/6/20
【2020-春】四年级数学精讲班	蒋艳玲	1099	19/4/20	26/6/20
【2020-春】四年级数学精讲班	刘罡	1099	19/4/20	26/6/20
【2020-春】四年级英语精讲班	韩冬雨	1099	18/4/20	27/6/20
【2020-春】四年级语文精讲班	吴月光	1099	18/4/20	27/6/20
【2020-春】四年级语文精讲班	王智	1099	18/4/20	27/6/20
【2020-春】四年级语文精讲班	王鑫宇	1099	19/4/20	26/6/20
【2020-春】五年级数学精讲班	王月欣	1099	19/4/20	26/6/20
【2020-春】五年级数学精讲班	王西蒙	1099	18/4/20	27/6/20
【2020-春】五年级英语精讲班	薛晓宾	1099	18/4/20	27/6/20
【2020-春】五年级语文精讲班	李佳蕨	1099	18/4/20	27/6/20
「走向名牌初中」数学冲刺课	刘庆涛	1500	18/5/20	31/5/20
「走向名牌初中」英语冲刺课	李勤骞	1500	20/5/20	31/5/20
【2020-春】七年级语文精讲班	王先意	1199	12/4/20	13/6/20
【2020-春】七年级语文精讲班	张颖	1199	12/4/20	13/6/20
【2020-春】七年级大科学精讲班	李雪冬	1199	12/4/20	13/6/20
【2020-春】七年级数学精讲班（北师）	李琪	1199	11/4/20	14/6/20
【2020-春】七年级数学精讲班（全国）	李琪	1199	11/4/20	13/6/20
【2020-春】七年级数学精讲班（全国）	王泽龙	1199	11/4/20	13/6/20

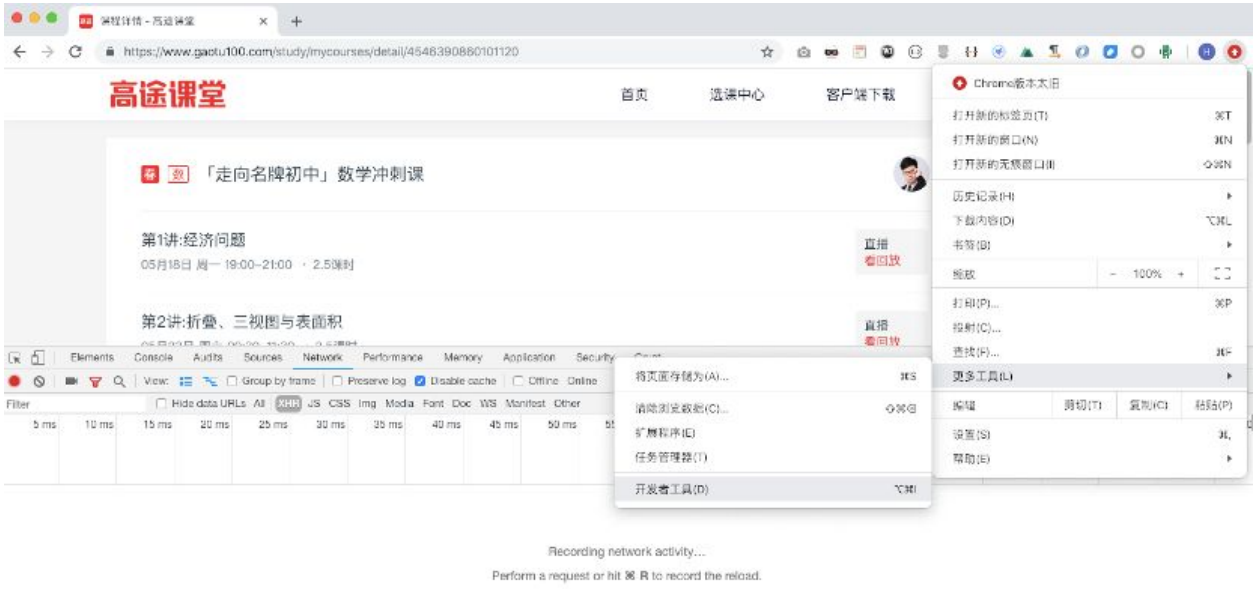
Snapshots of the tracked classes

Methodology

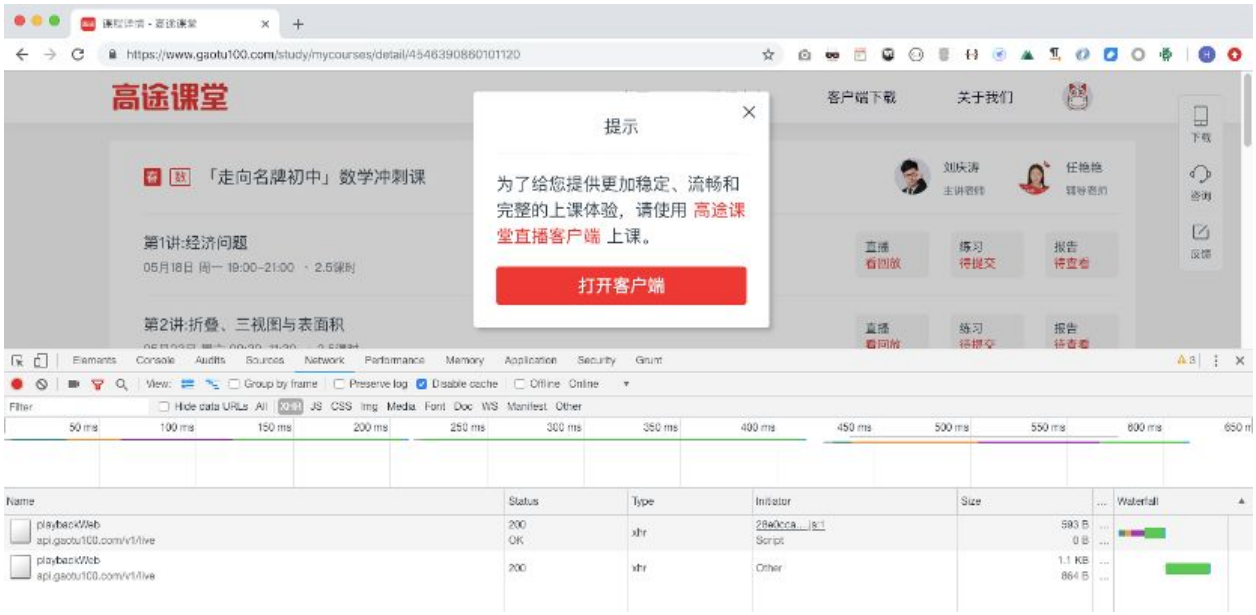
1. Enter and purchase class - for this we take “第1讲：经济问题” as an example



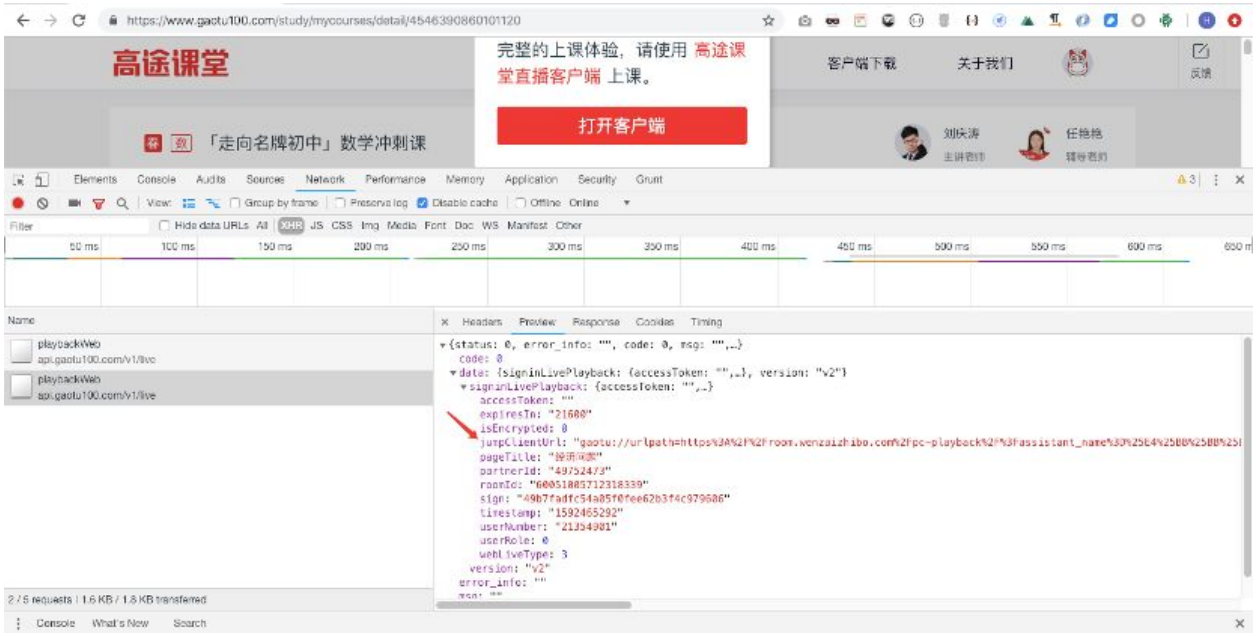
2. From the Google Chrome browser, open 'developer tools' and enter network page and choose "XHR" in the filtering device



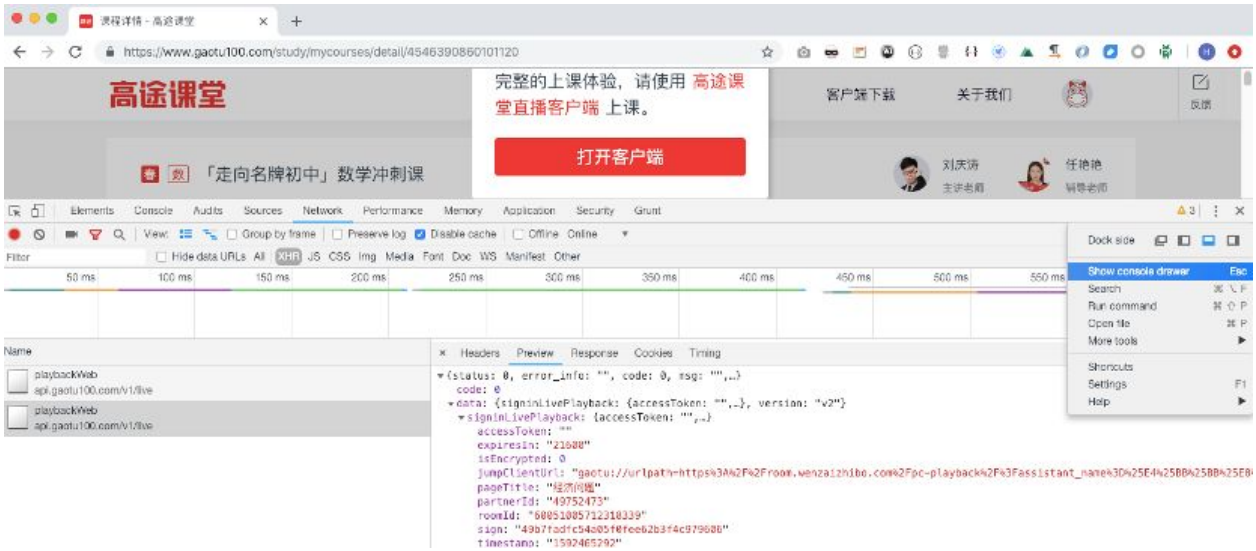
3. Click 'playback' in any of the recorded classes and click on '打开客户端' when it prompts

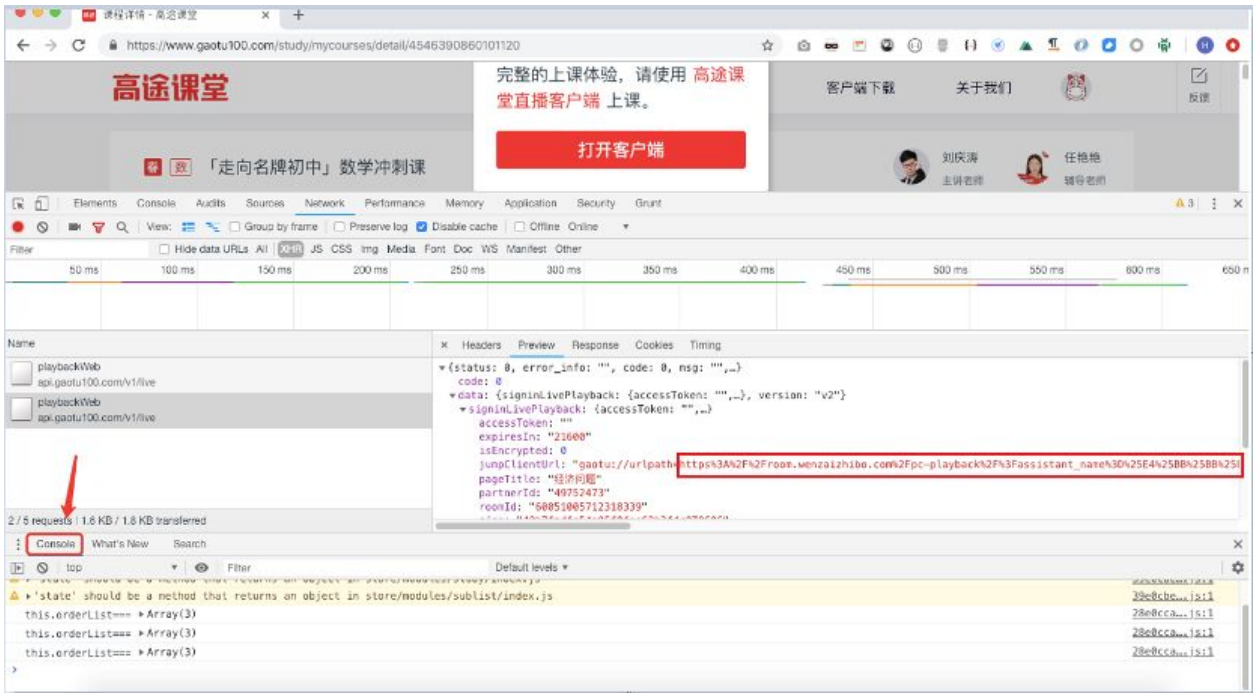


4. Click on the second playbackWeb request, and in the preview, 'jumpClientUrl'

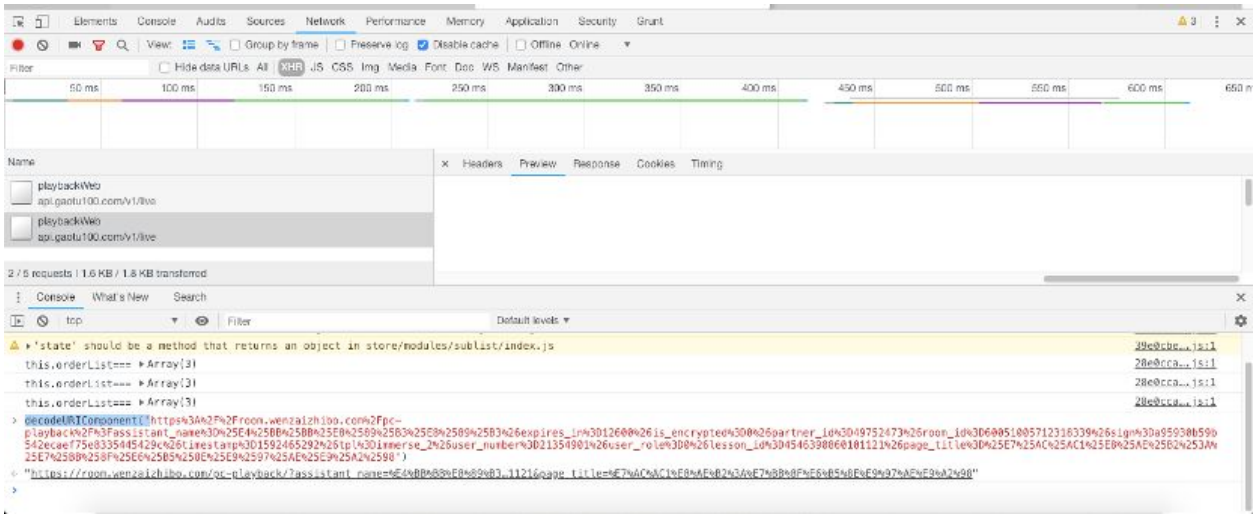


5. Open control panel and copy and paste 'jumpClientUrl' urlpath=content after（ http%3A%2F…）

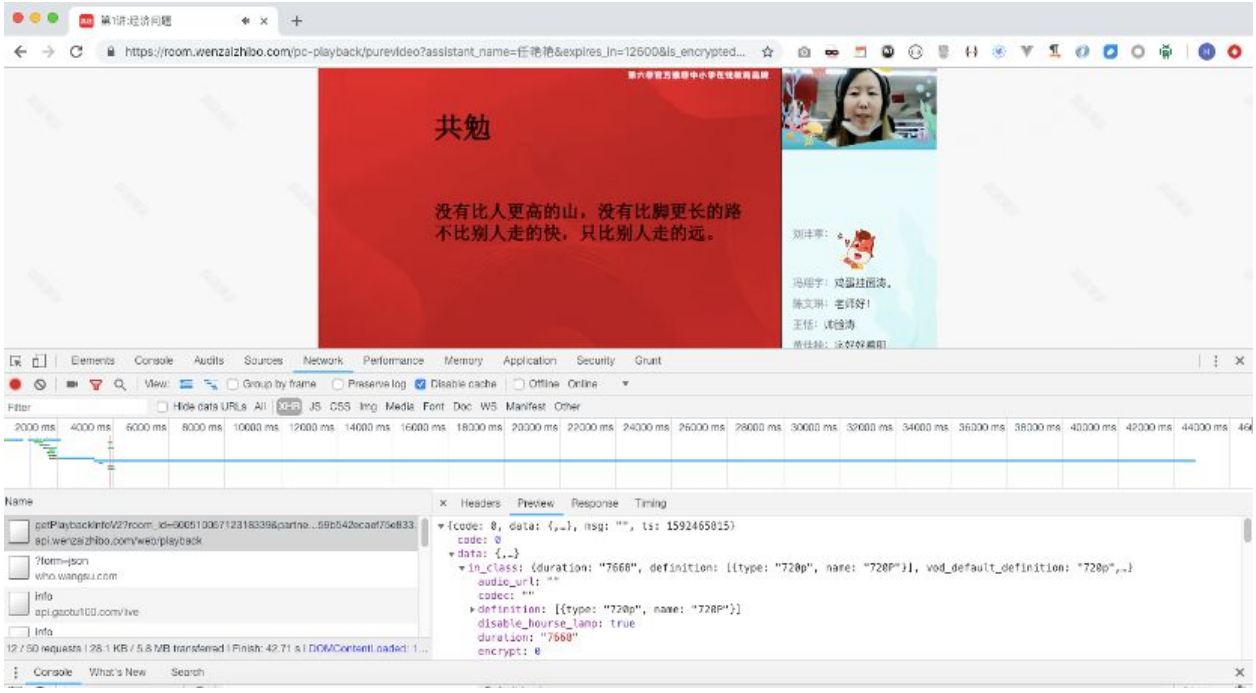




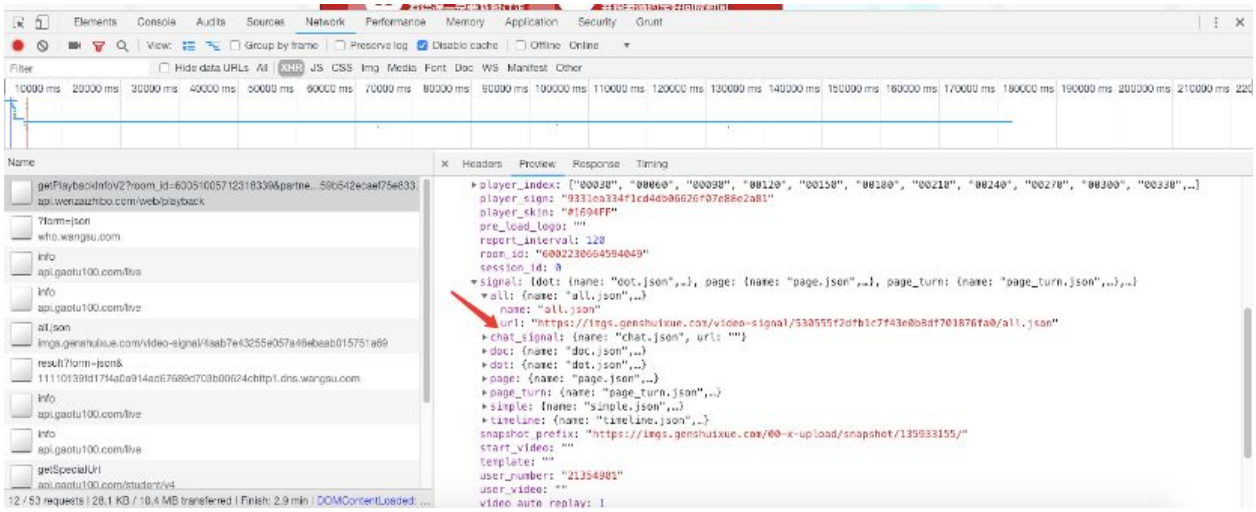
6. In the control panel, enter：decodeURIComponent('<copied content>'), click 'back', and link after the 'decoded component'：



7. Copy and paste the link on browser



8. In the 'getPlaybackInfoV2' preview window, follow '/data/in_class/signal/all/url' to find comments link. Use a download application such as (迅雷) and download the data package



9. After downloading, use json for batch display